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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,334	12/12/2001	Edwin Espanola Bautista	CM03513J/10-41	1739
23400	7590	11/30/2004	EXAMINER	
POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190			HOLLOWAY III, EDWIN C	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/020,334

Applicant(s)

BAUTISTA ET AL.

Examiner

Edwin C. Holloway, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20041015, 20041021.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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*Examiner's Response*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-15-04 has been entered.

2. In response to applicant's amendment filed 10-15-04, all the amendments to the specification and claims have been entered. The examiner has considered the new presentation of claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

*Claim Objections*

3. The objections to claims 5 and 17 made in the prior Office action are overcome by applicant's amendments to claims 5 and 17.

*Claim Rejections - 35 USC § 102 & 103*

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 8, 13-14, 20, 25 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in combination with Florac (US 2619589).

Regarding claim 1, Yamada discloses a selective call communications unit arranged and constructed for extended battery life comprising in combination:

- A first receiver having low power consumption for receiving a call signal to provide and enable signal (pager receiving circuit 32 in fig. 1)
- A messaging receiver different from said first receiver, activated by said enable signal, for receiving a message intended for the selective call communications unit (receiving circuit 23 in fig. 1).

See col. 3 line 21 - col. 4 line 46. The receiver 23 receives radio telephone (voice), picture or data communication (col. 3 line 31-36) that represents a message.

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The first receiver of Yamada lacks the low power consumption when operated continuously limitation of claim 1.

Florac discloses an analogous art radio paging receiver having a super-regenerative detector/receiver in order to allow low power dissipation and high sensitivity and stability. See col. 1 lines 45-53, col. 2 lines 34-44, col. 3 lines 35-45, col. 5 lines 10-20 and col. 5 line 44 - col. 6 line 38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the first receiver of Yamada the low power consumption when operated continuously limitation of claim 1 in view of the low power super-regenerative receiver disclosed by Florac for advantages such as low power dissipation and high sensitivity and stability and suggested by Yamada being directed to reduced power consumption.

Regarding claim 13, Yamada discloses a selective call communications unit method of extending battery life, including the steps of:

- First, receiving a call signal using a first receiver 32 to provide an enable signal in a first low power consumption mode (Fig. 2 steps S3 and S4)
- Second, receiving responsive to said enable signal and in a second power consumption mode (Fig. 2 steps S4 and S7) using a

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messaging receiver 23 different from said first receiver, a message intended for the selective call communications unit (Fig. 2 step S8).

Yamada lacks the first receiver of the low power consumption when operated continuously limitation of claim 13, but this limitation would have been obvious for the same reasons applied above to claim 1.

Claim 25 is similar to claim 1 with the addition of a transmitter activated by the enable signal. Therefore, claim 25 would have been obvious for the same reasons applied above to claim 1.

Regarding claims 2 and 14, the paging receiver of Florac is super regenerative.

Claim 31 is similar to claim 2, but lack the low power consumption when operated continuously limitation. Since claim 31 is broader than claim 2, claim 31 would have been obvious for the same reasons applied above to claim 2.

Regarding claims 8 and 20, Yamada teaches that the messaging receiver is activated by said enable signal receives a protocol arranged for messaging purposes (radio telephone or other data in col. 3 lines 31-37).

7. Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in combination with

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Florac (US 2619589) as applied above and further in view of Davis (US 4631737).

Regarding claims 3 and 15, Yamada teaches that the first receiver operates according to a duty cycle (intermittent receiving operation in col. 4 line 17). Yamada does not explicitly teach that the duty cycle is less than 50% (thereby being off more than it is on).

Davis discloses in col. 1 lines 38-54 that the typical battery saving cycle time scheme of a paging receiver is to switch the receiver ON for about 100 milliseconds every second. Therefore the typical paging receiver is ON for a 10% duty cycle that is less than 50%.

Regarding claims 3 and 15, it would have been obvious to one skilled in the art at the time of invention to place the selective call (pager) receiver of Yamada in a duty cycle less than 50% because Davis discloses this to be a typical battery saving cycle time scheme for a paging receiver.

8. Claims 11, 23, 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in combination with Florac (US 2619589) as applied above and further in view of Rotzoll (US 5790946).

Regarding claims 11, 23, 26 and 33, Yamada teaches that the battery based power supply (col. 3 lines 61-68) with a power

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supply control switch (41) to power said first receiver and messaging receiver. Although Yamada does not expressly state that the mobile radio apparatus has an expected battery life about the shelf life for a battery included in the battery based power supply, Yamada does teach to extend battery life as long as possible through power conservation by power supply control unit 41 to operate the pager receiver intermittently and only operate the radio telephone when a paging call is received. Further, Florac teaches battery life of several months in col. 5 line 20. Rotzoll discloses a two receiver communication system similar to Yamada with 98% power savings that directly corresponds to battery life expectancy in col. 2 lines 60-64. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included battery substantially the shelf life of the battery in view of the 98% power savings that directly corresponds to battery life expectancy in col. 2 lines 60-64 of Rotzoll.

9. Claims 9, 21 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) ) in combination with Florac (US 2619589) as applied above and further in view of Miller (US 5228053).

Regarding claims 9 and 21, Yamada does not teach that the messaging protocol uses a direct sequence spread spectrum phase



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shift keyed modulation (DSSS PSK).

Miller discloses a low power personal communication network (PCN) that uses DSSS PSK modulation. See col. 9 lines 24-45 and col. 8 lines 9-49. The low computer data, facsimile and voice in col. 1 lines 65-68 is similar to the telephone, picture or data terminal in col. 3 lines 31-37 of Yamada.

It would have been obvious to one skilled in the art at the time of invention to have included the DSSS PSK of Miller in the combination applied above because Miller teaches advantages such as low interference and low power are provided with DSSS PSK and is suggested by Yamada teaching similar uses of voice, picture/facsimile and data.

Regarding claim 34, Miller includes point-to-point communication in col. 2 lines 1-3 that corresponds to ad-hoc communication.

10. Claims 4-6, 16-18 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in combination with Florac (US 2619589) as applied above and further in view of Siwiak (US 5239306).

Regarding claims 4 and 16 Yamada teaches that the first (pager) receiver receives said call signal and remains powered up to demodulate and decode call signal (col. 3 lines 55-59 and col. 4 lines and col. 4 lines 15-20 but does not explicitly

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disclose detecting a selective call address. Siwiak discloses an analogous art selective call receiver that remains powered to allow decoder 106 to detect an address (See Fig 5a for chart detailing detection of selective call address according to step 516) with power conservation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the address detection of Siwiak to provide decoding of the paging call with power conservation.

Regarding claims 5 and 17, Yamada teaches that the first (paging) receiver provides an enable signal (control signal) upon decoding a paging call (col. 4 lines 15-25. Yamada does not express describe that the pager receiver compares said selective call address to an address for the selective call communications unit and when said address matches provides said enable signal and when said address does not match resumes operation according to said duty cycle. Siwiak discloses a selective call or pager receiver that decodes a paging call by comparing said selective call address to an address for the selective call communications unit and when said address matches provides said enable signal and when said address does not match resumes operation according to said duty cycle. (See Fig 5a for chart detailing comparison of selective call address to provide

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enable signal or resume duty cycle. Enable signal exemplified by blocks 516, 518, and A. Resuming duty cycle exemplified by sequence of blocks 516, 518, 520, 522 or 524). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the decoding operation of claims 5 and 17 as taught by Siwiak provide decoding of the paging call with power conservation.

Regarding claims 6 and 18, Siwiak teaches that the call signal is a frequency modulated FM signal (FM demodulator 108). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included frequency modulation in the paging signal of Yamada in the combination applied above because col. lines 15-17 of Siwiak teaches that virtually all conventional paging systems utilize frequency (FM) modulation.

Regarding claim 27, the receiver remaining active to receive a call address would have been obvious for the reasons applied above to claim 4. Amplitude Modulation (AM) is included in col. 3 line 63 - col. 4 line 31 of Siwiak for improved throughput. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included AM in combination applied above for improved throughput

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disclosed in Siwiak.

Regarding claim 28, Siwiak teaches that the selective call unit contains a comparator for comparing selective call address with an address for the selective call communications unit and when said address matches provide said enable signal (Receiver unit contains data processing block 114 for processing signal from first receiver. Comparison, thus comparator implied, is done in step 516. Step 518 determines if enable signal should be raised for messaging receiver). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included this operation in the combination applied above for the same reasons applied above to claim 15.

11. Claims 7, 10, 12, 19, 22, 24 29-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in combination with Florac (US 2619589) as applied above and further in view of Ghisler (US 5514976).

Regarding claims 7, 19, 24 and 32, Ghisler teaches and analogous art pager mobile telephone combination with low power operation. Ghisler discloses that the mobile telephone or messaging receiver is a superheterodyne or intermediate frequency receiver (Fig 4 and col. 9 line 58 - col. 10 line 4 including RF oscillator 125, RF demodulator 127 and IF demodulator 128). It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to have included the messaging receiver details of Ghisler in the messaging receiver to provide details of the mobile telephone demodulation in a device with reduced power consumption.

Regarding claims 10 and 22, Yamada and Ghisler teach that the power consumption of the said messaging receiver exceeds a power consumption of the said first receiver. See the abstracts.

Regarding claims 12 and 29, Yamada teaches that the messaging receiver activated by the enable signal to wait a predetermined time to receives a call signal or power down if no call signal is received. (S7-S8 in fig. 4, col. 5 lines 1-12). Yamada does not teach that the messaging receiver detects a selective call address, but an address is considered to be part of the conventional mobile telephone call. Ghisler teaches decoding control signals such as FACCH and SACCH in col. 10 that inherently include addresses. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the message receiver of Yamada the address detection of claim 7 as exemplified by the FACCH and/or SACCH decoder of Ghisler for conventional mobile telephone call detection.

Regarding claim 30, according to the rejection of claim 12

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it would have been obvious to use a selective call-addressing scheme in the messaging receiver as taught by Ghisler. Further, Yamada teaches that the messaging receiver activated by the enable signal to wait a predetermined time to receives a call signal or power down if no call signal is received.(S7-S8 in fig. 4, col. 5 lines 1-12).

12. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in combination with Florac (US 2619589) as applied above and further in view of Nysen (US 5252979). Nysen discloses a low power universal communication system with the advantage of allowing ad-hoc networks while still allowing host networks to be formed. See col. 6 line 45 - col. 7 line 3 and col. 1 lines 37-40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included this feature in the combination applied above to allow ad-hoc networks in addition to host networks so that communication may still be available where there is no base station or network backbone.

13. Claims 1-2, 7, 10 13-14, 19, 22, 25 and 31 are rejected under 35 U.S.C. 102(e,a) as being anticipated by Addy (US 6255944). Addy discloses a selective call unit with a low power, first receiver 38 and messaging, second receiver 42. See figs. 1 and 4 and col. 3 line 35 - col. 8 line 54. The first

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receiver is super-regenerative, tuned RF or diode detector receiver in col. 4 lines 54-58. The second receiver is superheterodyne in col. 5 line 5.

### ***Response to Arguments***

14. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nee (US 3118145), Vrijkorte (US 4943803) and Gaulke (US 5737707) disclose selective call units with dual receivers and power conservation.

### ***CONTACT INFORMATION***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at [ebc@uspto.gov](mailto:ebc@uspto.gov). The Patent EBC is a complete customer service center that supports all Patent e-business products and service applications. Additional information is available on the Patent EBC Web site at <http://www.uspto.gov/ebc/index.html>.

Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (571) 272-2600.


Facsimile submissions may be sent via fax number (703) 872-9306 to customer service for entry by technical support staff.

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Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068.

EH  
11/26/04

  
EDWIN C. HOLLOWAY, III  
PRIMARY EXAMINER  
ART UNIT 2635